REPORT TO THE TWENTY-THIRD LEGISLATURE
REGULAR SESSION OF 2006

REQUESTING A REVIEW AND ANALYSIS OF THE ISSUES SURROUNDING THE SHORELINE CERTIFICATION PROCESS FOR THE PURPOSE OF ESTABLISHING SHORELINE SETBACKS

PREPARED BY:
STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

IN RESPONSE TO:
SENATE CONCURRENT RESOLUTION 51, SENATE DRAFT 1
REGULAR SESSION OF 2005

DECEMBER 2005

Requesting a Review and Analysis of the Issues Surrounding the Shoreline Certification Process for the Purpose of Establishing Shoreline Setbacks.

I. PURPOSE OF THE REPORT

This report is submitted in response to Senate Concurrent Resolution (SCR) 51, Senate Draft (SD) 1 adopted by the Twenty Third Legislature of the State of Hawaii, Regular Session of 2005. SCR 51 SD1 requests the Department of Land and Natural Resources (DLNR) to convene a working group to review current laws and administrative rules governing shoreline certifications by identifying specific problems and issues regarding the implementation of the laws and rules, exploring alternatives, and making recommendations to address the problems and issues.

SCR 51 SD1 stated the purpose of the working group is to:

1. Conduct a review of the issues surrounding the shoreline certification process for the purpose of shoreline setbacks;

2. Review current laws and administrative rules governing shoreline certifications by identifying specific problems and issues regarding the implementation of the laws and rules;

3. Explore alternatives; and,

4. Make recommendations to address the problems and issues.

Four working group meetings were held with a broad group of regulatory, environmental, cultural and private property representatives (Appendix A). The meetings were intended to discuss and hopefully, generate consensus on:

1. The purpose of the shoreline certification process;
2. A problem statement;
3. Recommendations for alternative solutions including long and short-term solutions.

The Working Group agreed that the primary purpose of shoreline certifications is to establish a reference line for setback purposes, pursuant to Chapter 205A, Hawaii Revised Statutes (HRS), and to delineate the jurisdictional boundary between the Conservation District and other state and county land use districts. Although shoreline certifications have been used to establish a makai property boundary for purposes of ownership, this is not the intended use of shoreline certifications as set forth under Chapter 205A, HRS. However, some members of the Working Group believe that shoreline certification delineated the makai property boundary.

Moreover, SCR 51 SD1 clearly states that the purpose of the Working Group is to conduct a *review of the issues surrounding the shoreline certification process for the purpose of establishing shoreline setbacks, review current laws and administrative rules governing shoreline certifications by identifying specific problems and issues regarding the implementation of the laws and rules, exploring alternatives, and making recommendations to address the problems and issues.*

Having clarified these distinctions, the Working Group considered whether shoreline certification is a purely technical matter (e.g., elevation tidal datum), or whether it is an ecosystem management-based policy issue related to the protection of beaches and reduction of coastal hazards. Discussion has centered on the need for a more consistent and clear shoreline feature that is more easily recognized and whether the current definition of shoreline is appropriate for shoreline setback purposes (see Appendix B Working Group Discussion)

II. GOAL OF SCR 51 SD1

This report recognizes that the certified shoreline is used for setback, zoning, and public access. Given these multiple uses, it is important to focus on the intended purpose of SCR 51 SD1.

1. One obvious intended purpose the group agreed upon is to evaluate the certified shoreline as an appropriate baseline for the setback determination.

2. Group discussion revealed a lack of agreement as to whether (1.) the sole intention of SCR 51 SD1 was specific to shoreline setbacks and it was suggested that the intention was broader and meant to encompass aspects of public access, ownership, and jurisdiction as well as the setback determination.

III. LEGAL FRAMEWORK: LAW OF THE SHORELINE IN HAWAII

HAWAII SUPREME COURT PRECEDENT

In the 1960s and 1970s, the Hawaii Supreme Court (Court), led by Chief Justice William S. Richardson, issued a series of historic and visionary case decisions establishing the law regarding the location of shorelines in Hawaii. These decisions afforded broad recognition and protection of shoreline areas and public beach access and still stand as among the most distinguished legacies of the Court to the law and people of Hawaii. In re Ashford, 50 Haw. 314, 440 P.2d 76 (1968), the Court ruled that the term "ma ke kai" (along the sea) in royal land patents established the boundary of the shoreline according to the following terms: "along the upper reaches of the wash of the waves, usually evidenced by the edge of vegetation or by the line of debris left by the wash of the waves." (50 Haw. at 315, 440 P.2d at 77) The Court rejected an alternate interpretation of "mean high water," which would have located the shoreline more makai and would have left the shoreline under water much of the time.

In County of Hawaii v. Sotomura, 55 Haw. 176, 517 P.2d 57 (1973), the Court recognized its Ashford decision as "a judicial recognition of longstanding public use of Hawaii's beaches to an easily recognizable boundary that has ripened into a customary right." (55 Haw. at 181, 182, 517 P.2d at 61) The Court emphasized that "public policy, as interpreted by this Court, favors extending to public use and ownership as much of Hawaii's shoreline as is reasonably possible." (55 Haw. at 182, 517 P.2d at 61, 62)

The Court in the Sotomura case held that the Circuit Court correctly determined the shoreline to lie along "the upper reach of the wash of the waves," pursuant to Ashford. (55 Haw. at 182, 517 P.2d at 62). However, the Circuit Court erred in locating the shoreline at the debris line, which lay more makai of the vegetation line. The Court held "as a matter of law that where the wash of the waves is marked by both a debris line and a vegetation line lying further mauka, the presumption is that the upper reaches of the wash of the waves over the course of a year lies along the line marking the edge of vegetation growth.", (55 Haw. at 182, 517 P.2d at 62).

The Court further recognized that "[l]and below the high water mark, like flowing water, is a natural resource owned by the State subject to, but in some sense in trust for the enjoyment of certain public rights" (55 Haw. at183,184, 517 P.2d at 63, citation omitted)– a concept commonly known as the "Public Trust Doctrine." The Court explained that it had long recognized the Public Trust Doctrine and reaffirmed the Doctrine's foundational principle that the land below the shoreline "belongs to the State of Hawaii." (55 Haw. at 184, 517 P.2d at 63).

Within In re Sanborn, 57 Haw. 585, 562 P.2d 771 (1977), the Court reiterated that "the law of general application in Hawaii is that the beachfront title lines run along the upper annual reaches of the waves, excluding storm and tidal waves." (57 Haw. at 588, 562 P.2d at 773). The Court approved the lower Court's designation of the shoreline at the "vegetation and debris line," which marked "the upper reaches of the wash of waves during ordinary high tide during the winter season, when the …waves are further mauka (or inland) than the highest wash of waves during the summer season." (57 Haw. at 588, 562 P.2d at 773, citation omitted).

The Court in the Sanborn case also reaffirmed that "land below [the] high water mark is held in public trust by the State, whose ownership may not be relinquished, except where relinquishment is consistent with certain public purposes." (57 Haw. at 593, 594, 562 P.2d at 776)The people of Hawaii have enshrined the public trust doctrine in their state constitution. Article XI, section 1 of the Hawaii State Constitution declares that "all public resources are held in trust by the state for the benefit of its people," which the Hawaii Supreme Court ruled "adopt[s] the public trust doctrine as a fundamental principle of constitutional law in Hawaii

In sum, the seminal shoreline cases of the Hawaii Supreme Court have established the shoreline "along the upper annual reaches of the wash of the waves, excluding storm and tidal waves," "usually evidenced by the edge of vegetation or by the line of debris left by the wash of the waves." These rulings manifest the express public policy of "extending to public use and ownership as much of Hawaii's shoreline as is reasonably possible" and

the long-recognized principle, now enshrined in the Hawaii State Constitution, that lands below the shoreline are held by the State as a public trust for the people of Hawaii. These cases established a recognizable reference point to locate a shoreline boundary, which was subsequently adopted in Chapter 205A, HRS, as the reference point to delineate the shoreline for setback and jurisdictional purposes.

IV. PURPOSE OF SHORELINE CERTIFCATION

The primary purpose of shoreline certifications is to establish a baseline for setback purposes, pursuant to Chapter 205A, HRS. The shoreline also delineates the jurisdictional boundary between the State-managed Conservation District and other state and county land use districts. In addition, on many beaches the shoreline also is perceived as defining the mauka edge of public access along the shoreline (§ 115-5, HRS - recognizing a public "right of transit along the shoreline" and citing the definition under court rulings and Chapter 205A, HRS).

The erosion zone, the area with the most varied and dangerous forces of nature including storm surge, tsunami inundation, and shoreline recession, is the most intensively developed land in Hawaii. The State and counties have an obligation to insure that the vulnerability of coastal construction too near a rising sea fraught with sudden and unstoppable hazards, is effectively mitigated. Accurate shoreline delineation at the annually reoccurring, upper reach of the wash of the waves is one necessary and effective measure in the effort to deter dangerously sited construction and protect the public interests.

Disagreement Regarding Ownership There was disagreement within the Working Group regarding the use of the shoreline for determining ownership. Some Working Group members looked to Chapter 205A, HRS, and found no language relating the shoreline to land ownership. Other members held that the shoreline acts as a *de facto* property boundary in two ways:

1. The legal standard used to determine the shoreline for setback purposes is the same standard that is used to set seaward property boundaries. Hence, in practice, surveyors use the same methods to determine the shoreline whether for setback or ownership purposes and often rely on previous shoreline certifications to establish the property boundary. §115-5, HRS, refers to the private property line as the shoreline.

2. Abutting owners and the user pubic often assume a certified shoreline marks ownership. Worse, abutting owners and the public mistakenly assume a vegetation boundary marks ownership, and hence public access. This emboldens abutting owners to defend land mauka of a vegetation boundary, and public users become afraid to use or cross-vegetated lands.

Shoreline Delineation Process To establish the position of the shoreline, a private surveyor is typically hired by a landowner seeking a permit to conduct activity in the shoreline area. The Surveyor's job is to determine the location of the high wash of the

waves as regulated by Hawaii Administrative Rule (HAR) §13-222-7. This permit application is reviewed by the State Surveyor of the Department of Accounting and General Services (DAGS) and DLNR staff, and if accepted, signed by the Chairperson of DLNR. Public review of proposed shoreline certifications is offered through publication of application notices in the Department of Health's Office of Environmental Quality Control (OEQC) *Environmental Notice*. The public can also request a site visit where they are offered an opportunity to share their perspective. If a member of the public finds a proposed application recommended for certification unacceptable, they may then appeal the application and submit a brief supporting their argument for consideration by the Chairperson and the DAGS/DLNR staff.

V. DEFINITION OF SHORELINE

1. HRS Shoreline Definition

   The shoreline is defined by statute in §205A-1, HRS, as:

   "…the upper reaches of the wash of the waves, other than storm and seismic waves, at high tide during the season of the year in which the highest wash of the wave occurs, usually evidenced by the edge of vegetation growth, or the upper limit of debris left by the wash of the waves."

2. DLNR's HAR

   The DLNR §13-222-7, HAR, defines the shoreline as (emphasis added):

   "…the upper reaches of the wash of the waves, other than storm ***or tidal waves****, at high tide during the season of the year in which the highest wash of the wave occurs, usually evidenced by the edge of vegetation growth,* ***or where there is no vegetation in the immediate vicinity****, the upper limit of* ***the*** *debris left by the wash of the waves."*

Emphasis on Vegetation These two definitions, which are not exactly the same, allow for different interpretations of the certified shoreline. The underscored clause is extra language not found in the statute. The terms of the administrative rules could be read to establish a preference for the vegetation line as the presumptive indicator of the shoreline, allowing use of the debris line as the presumptive indicator of the shoreline only "where there is no vegetation in the immediate vicinity."

The HAR definition reduces interpretation by clearly establishing the vegetation line as the preferred position for the shoreline, and relegates the debris line as a secondary proxy. Because of this, some landowners have cultivated vegetation in order to shift Special Management Area (SMA) activities closer to the ocean, presumably taking advantage of greater building area and raising land value by improving views and the apparent desirability of buildings with closer proximity to the water.

VI. CURRENT USE OF CERTIFIED SHORELINE

The "certified shoreline" is used for three (3) separate and distinct purposes. The three (3) purposes are:

1. Setback (County setback for buildings);

2. Zoning (makai or seaward of shoreline is State Conservation District); and

3. Public beach access along the shoreline.
   Shorelines were initially used to determine ownership (makai boundary/property line). Some old deeds contain the term "ma ke kai" as the seaward property boundary line. Subdivided or consolidated properties often use the certified shoreline as their "new" seaward boundary when their property erodes. Over time, the certified shoreline has also been used for zoning (State Conservation District and County zoning) and for building setback purposes.

   The shoreline working group agreed the primary purpose of shoreline certifications is to establish a baseline for setback purposes, pursuant to Chapter 205A, HRS, and to delineate the jurisdictional boundary between the Conservation District and other State and County Land Use Districts. Although shoreline certifications have been used to establish a makai property boundary for purposes of ownership (through the County subdivision/consolidation process), this is not the intended use of shoreline certifications as set forth under Chapter 205A, HRS. Moreover, SCR 51 SD1 clearly states that the purpose of the working group is to evaluate the issues surrounding the shoreline certification process for the purpose of shoreline setbacks. The establishment of shoreline boundaries for the purpose of property ownership is a separate issue that is beyond the scope and intent of SCR 51 SD1.

   Without maintaining a clear focus on the purpose ofSCR 51 SD1, it is easy to see how the discussion on shoreline issues can move in multiple directions. It is appropriate at this time to recognize the role and responsibilities in this dynamic shoreline area.

   Jurisdiction:

   a) Mauka (landward) of the shoreline:

      i. County Authority (Planning Departments) for building permits and setback—Counties regulate the type of structure, allowable uses on the property, and determine how close these structures can be constructed to the shoreline.

      ii. Public Access—Counties are mandated to provide public access to the shorelines, and as shorelines erode, that public access can be hindered, if not lost.

iii. Private Property Owners—Private property owners must comply with the County zoning (land use) and setback requirements for structures built along the shoreline.

b) Makai (seaward) of the shoreline:

i. State Authority (DLNR)—All lands makai of the shoreline are in the Conservation District and all land uses in the Conservation District are regulated (i.e. Conservation District Use Application Permits) by DLNR. Various State and Federal agencies also have jurisdiction below Mean High Water (MHW).

ii. Private Property Owners—Private property is lost through erosion which is determined by the certified shoreline. Based on case law, the public has a right to lateral shoreline access along the shoreline on any shoreline property in the State of Hawaii.

iii. Public Trust—Based on Hawai‘i case law, the public has a right to lateral shoreline access along the shoreline on any shoreline property in the State of Hawai‘i. As shorelines erode, that public access can be hindered, if not lost.

iv. Cultural Resources—Coasts along all of the Hawaiian Islands, especially sandy beaches, have been traditional and customary burial areas for Native Hawaiians. Therefore, as these beaches erode, several iwi kūpuna have been uncovered.

VII. INDUCED VEGETATION

We would be remiss if this report did not include a discussion on “induced vegetation.” Much of the attention regarding certified shorelines has been focused on “induced vegetation” or situations where the vegetation has been induced, through artificial means, makai of the natural vegetation line. This “induced vegetation” often results in construction being allowed closer to the natural vegetation line restricting access along the public beach areas. Ultimately, seawall construction on chronically eroding coasts to protect improvidently placed buildings leads to beach loss, restricted public access, environmental degradation, and decreased property value. The cost to abutting owners and the public are equally high in such situations.

While induced vegetation presents a serious problem in certain areas there are existing policies that address such problems.

1. Landscaping of the shoreline may be considered an encroachment on public lands and a violation of §171-6.5 HRS (unauthorized use of public lands).

2. These activities may also be a violation of the Conservation District statutes and rules which prohibit unauthorized land uses in the Conservation District (§183C-7, HRS.)

The problem of "induced vegetation" is compounded by the difficulty of enforcement by the State and County agencies.

1. Often it is extremely difficult to determine if vegetation is natural or induced or whether it is in the Conservation District or not. In cases where it is inconclusive whether the vegetation is natural or not, close examination of other criteria and implementing new mechanisms may be beneficial during the shoreline review process.

2. This enforcement problem is the direct result of the lack of adequate funding for staff and resources over the last 10 to 12 years. The problem of "induced vegetation" is largely a function of the fact that the State and Counties have not been able to adequately inspect applications for shoreline certification and to enforce the shoreline certification rules.

3. Solutions might include holding shoreline certifications until the season of high surf to more accurately determine the shoreline, investigating historical shoreline data to determine if the subject vegetation is natural or not, and requiring a signed affidavit by the landowner that the vegetation has not been induced as part of the shoreline certification application.

4. The problem with shoreline certifications will only get worse without a commitment of staff and resources to these programs. Changing the definition of shoreline will not improve the enforcement and management of the shoreline certification process.

VIII. STATEMENT OF PROBLEM

Fundamentally, §205A-1, HRS, and §13-222-7, HAR, are imprecise enough to allow ample opportunity for personal interpretation depending on ones bias. Historically, the industry practice had commonly adopted the vegetation line as the shoreline proxy. Differences between HRS and HAR also open the door to manipulation of the definition for unintended purposes. The problem with shoreline certifications leads to several primary questions:

1. Does the shoreline serve as an adequate basis for determining the setback?

2. Does the shoreline adequately protect public access and, equally, private property rights?

3. Does the jurisdiction function of the shoreline provide sufficient protection of natural and cultural resources and the intent of zoning?

4. Will change in the definition dramatically improve the coastal resource problems described?

IX. PROBLEMS AND CONSEQUENCES

Problems The working group reviewed and discussed the primary problems associated with the current shoreline certification process and developed the following list of problems:

1. Widespread and (historically) nearly exclusive use of (induced) vegetation as shoreline indicator.

2. Vegetation moving seaward unnaturally through landscaping (covering conservation lands).

3. Common, aggressively-growing, salt-tolerant vegetation able to withstand regular inundation is not an accurate indicator of the shoreline.

4. Shorelines commonly too makai compromising the Conservation District Use Permit process and public trust.

5. Shoreline certification process bifurcates the coastal dune system in two parts; this is not a good management practice. Dune and beach are not managed consistently between the counties and the state.

6. Difficult to separate the various purposes of shoreline: setbacks, jurisdiction, public access, private property. Shoreline certification was created for setback purposes. Shoreline use for zoning and title purposes, in addition to setback determination, creates the problem and (importance) of satisfying all three purposes.

7. Discrepancy between the statue and the rule in defining "shoreline".

Aspects of certification are unclear: What is induced vegetation? Does gravity flow of seawater represent the shoreline? When should debris vs. vegetation be preferred? When is vegetation appropriate/inappropriate for dune stabilization vs. certification? Does the absolute highest wave set the shoreline, or some lower more frequently wetted zone?

Consequences The emphasis on vegetation leads to five negative consequences:

1. By promoting vegetation growth (and consequentially the shoreline) lower on the beach face, building construction creeps into erosion hazard zones leading to the eventual construction of seawalls and associated loss of beach on chronically eroding coasts;

2. Cultivation of vegetation onto the beach reduces beach width. This physically and psychologically squeezes the public into a narrow corridor of access, or eliminates access completely.

3. Artificial vegetation growth on the beach, and its eventual certification, converts land that should rightly be managed under the conservation zone, to land that is private or

managed by county zoning practices;

4. Artificially cultivated vegetation that is unnaturally watered and nourished develops thick and deep penetrating root balls that bind sand in the back-beach and dune regions. This prevents sand from moving onto the beach during periods of high waves reducing available sand on dynamic beaches, similar to the effect of a seawall. The result is a form of unnatural vegetative armoring that reduces the critical sand budget on dynamic beaches. It has the potential impact of leading to beach narrowing by sand loss.

5. Legal proceedings that convey land rely on the same surveyors to interpret the shoreline position by locating the upper wash of the waves. In practice they exercise the same standards used in the certification process and use the vegetation line in the same way that they use it for the certification process. Hence, artificial vegetation growth leads to actual public land loss and reduction of legal public access.

X. RECOMMENDATIONS

Following these discussions, the Working Group has identified and agreed upon both long and short term goals to improve the shoreline certification process. Short-term is defined as occurring within the next 12 months.

1. Short-Term Changes

   a. Shoreline Definition Change. Redefine the HAR shoreline definition to conform to the HRS definition. This would involve a rule amendment to remove the following wording from the HAR shoreline definition "**or where there is no vegetation in the immediate vicinity."** Replace "**tidal waves**" with "**seismic waves**". The word "**the**" in front of "debris" would be stricken.

   b. Amend §13-222, HAR, to clarify and document current practices, standards and features currently being used by DLNR in determining the certified shoreline. (See Appendix B).

   c. Shoreline delineation should be based on a preponderance of evidence that indicates the **most mauka position** of the shoreline set by the single highest wave. (See Appendix C).

   d. Establish funding and resources to increase enforcement efforts of State and County shoreline rules, specifically unauthorized landscaping of shoreline area and illegal structures.

   e. Integrate state and county (and federal where applicable) programs and procedures to improve coastal management.

   f. **Recognize and protect coastal dunes** as integral to beach protection in state and county coastal management procedures.

g. Shoreline certification should occur **during the high wave season and include observations of highest swell events (including non-hurricane storms)**, or application should include direct observations of recent swell events, or photographs of the high wave period. If this is not possible then scientific evidence should be referenced.

h. DLNR obtain funding to **map coastal conservation lands**. This effort should begin on dynamic coasts with high seasonal surf where development and coastal construction is most vulnerable to coastal hazards.

i. Build a database of shoreline locations based on observational evidence, modeling of wave run-up, and other scientific methods. Use this database to construct high resolution photo basemaps of shoreline locations.

2. Long-Term Changes

a. Revision of the State shoreline certification process. Applicants apply to DLNR, who then contracts commercial surveyors, rather than landowners hiring their own private surveyors for a shoreline survey. The State Shoreline Specialist and State Surveyor then work directly with surveyors on locating the shoreline. This would require increased resources for DLNR/DAGS.

b. Shift shoreline location process to rely increasingly on scientifically established photo basemaps showing Tax Map Key boundaries. These are provided to surveyors to locate the shoreline on the ground using leveling skills in which they are trained, rather than wave interpretation in which they are not trained.

c. Create an annual **training workshop** for commercial surveyors teaching database access/interpretation and coastal processes and interpretation.

d. Revise HAR to better define standards and specific definitions (what is run up, storm, high wash, etc.) See proposed HRS changes below.

e. Incorporate an ecosystem-based management approach to certification that incorporates the entire coastal dune rather than bifurcating the dune at the crest. Revise state jurisdictional boundary to include the entire dune (landward base of primary dune).

f. Increase state and county enforcement of shoreline rules, specifically vegetation of shoreline.

g. Adopt new HAR regulation that no new shoreline certifications shall be established makai of a previous certification.

h. Shoreline Pilot Project. Map multiple features as a pilot project to test various definitions. Useful as a reference and refinement of shoreline feature criteria.

i. Adopt new HAR that **no new shoreline certifications shall be established makai** (or seaward) of a previous certification.

j. Conduct an analysis of the impact of vegetative encroachments on sandy beach processes including changes to the beach profile. This would address the question of "To what degree has the natural beach vegetation been replaced with fast growing salt tolerant vegetation in the past century?"

k. Surveyors required to map multiple features during survey including:
   - Boundaries (currently done)
   - Shoreline (currently done).
   - Baseline for setback
   - Other features (debris lines, vegetation line, dune crest)
   - Interpretive features identified by State shoreline specialist and mapped by professional surveyors.
   - Require digital Geological Information System (GIS) format for maps.
   - Establish Web-based public GIS database of shoreline certifications for quick access and review.

l. Proposed change to Chapter 205A-1, HRS, shoreline definition to read as:
Shoreline is- "…the highest documented annual reach of wave run-up on the shore, (other than hurricane and tsunami waves), or seaward edge of stable, natural vegetation, whichever is more mauka"

m. Add the following definitions to Chapter 205A-1, HRS:
   - **"the highest"** leads to interpretation that the shoreline will be set by the single highest wave, not a lower grouping of waves.
   - **"documented"** means that the position of the highest wave(s) must be documented by a method, or methods, to be described in the HAR. This means that a proxy may be used but that it must have some defined relationship to the edge of wave run-up and represents the highest annual reach.
   - **"annual"** means that the wave must have a statistical recurrence interval of at least once per year.
   - **"run-up"** means that the water position setting the shoreline must be derived exclusively by wave energy run-up and not aided by gravity or funneling through narrow passages. Where it is unclear to what extent gravity flow played a part in the run-up, the transition from run-up to gravity flow shall be interpreted as the shoreline (based on evidence, expert knowledge and reasonable expectation).
   - **"hurricane waves and tsunami waves"** means that the wave used to set the shoreline cannot be the result of a named local hurricane or a tsunami. Storm run up shall be considered when locating the shoreline.

NOTE: This definition requires that a comprehensive wave run-up analysis be carried out and documented in some manner delineated by HAR and that the highest wave run-up (or a proxy) be identified and mapped for use in the certification review process.

XI. CONCLUDING REMARKS

The shoreline is a dynamic environment and there is a need to recognize that the public's right to access along the shoreline must be balanced with the abutting owners' right to protect their private property. The challenge that faced the working group was to develop a policy that fairly balances these two, sometimes overlapping, rights. The problems associated with shoreline certifications and coastal land use are varied and complex and will only get worse without a commitment of staff and resources to these programs. Changing the definition of shoreline will not single handedly improve the enforcement and management of the shoreline certification process due to the complex shoreline land use and enforcement issues that have evolved.

Appendix A

Meeting Schedule and Invited Participants

Meeting Dates:
July 13, 2005
August 3, 2005
September 7, 2005
October 5, 2005
Subsequent reviews via email

Invitees (*Attended one or more meetings):

Morris Atta*	Land Division, DLNR.
Jennifer Bethel*	Chairperson's Office DLNR
Donna Brown	Marine and Coastal Zone Advisory Council (MACZAG)
Ian Costa*	Planning Director, Kauai County
Caren Diamond*	Sierra Club
Chris Conger*	University of Hawaii (UH) Sea Grant
Mary Cummins	Hawaii Land Consultants
Pat Cummins*	Hawaii Association of Land Surveyors
Henry Eng	Planning Director, City and County of Honolulu
Dolan Eversole*	UH Sea Grant
Sonia Faust	Department of the Attorney General
Charles Fletcher*	UH
Mike Foley	Planning Director, Maui County
Heidi Guth*	Office of Hawaii Affairs (OHA)
Brian Keaulana	Hawaiian Community (Makaha)
Sam Lemmo*	Office of Conservation and Coastal Lands, DLNR
Jeff Mikulina*	Hawaii Chapter Sierra Club
Clyde Namu'o	OHA
Zoe Norcross-Nu'u	UH Sea Grant
William Ornellas	Hawaiian representative
Sue Saki	MACZAG
Reid Siarot*	DAGS- Survey
Paul Swind*	Land Use Research Foundation (LURF)
Nainoa Thomson-	Trustee Kamehameha Schools
Debra Tom*	Coastal Zone Management/Office of Planning
Don Thornburg*	MACZAG
Dean Uchida*	LURF
Mike Varney*	Public Access Shoreline Hawaii (PASH)
Chris Yuen	Planning Director, Hawaii County

Additional comments received from

Eileen Mark	Planner, City and County of Honolulu
Thorne Abbott	Planner, Maui County Planning Department
Peter Young	Chairperson, DLNR
Deborah Chang	Planner, Hawaii County Planning Department

Appendix B

WORKING GROUP DISCUSSION

Recently, concerns have centered on: how shorelines are located, induced shoreline vegetation, illegal shoreline structures, and encroachments on public beach areas restricting access. These concerns illustrate the need for increased enforcement of existing shoreline rules in addition to proper administration of the shoreline setback rules. Because the coastal zone is a dynamic and constantly changing environment, it may be prudent to consider using a different definition of shoreline for setback purposes (possibly called a baseline) for more appropriately use in the shoreline setbacks as well as separate a baseline from ownership and zoning issues. Because the current certified shoreline is used for three purposes, the working group discussed the following:

1. <u>Identify an objective, and easily determined or located "baseline" or "Set Back Line" to be used for "Set Back Purposes Only."</u>

   Proposed: Establish a *datum elevation* (completely objective and scientific) as the baseline for setback purposes.

   Con: i. Because different coastal settings have differing topography and relief, it is not clear how the setback would be adjusted to re-establish appropriate protections.

   ii. Use of a vertical datum elevation for setback would be subject to seasonal dynamics that impact the horizontal position of the shoreline leading to improper and unreliable application of the setback regulation, and thus presents problems of seasonal interpretation, and potential manipulation of the shoreline location.

2. <u>Use the "top of seaward dune" as one of the criteria in locating the certified shoreline.</u>

   Proposed: It is a recognized stable feature of a many sandy beaches, and criteria could be established for its objective location and more identifiable features. Would increase shoreline public access in many areas by moving the shoreline mauka. Add term "..or whichever is more mauka" to definition to ensure conservative location.

   Con: i. Neither the statutes nor Administrative Rules mention the use of "top of beach dune" in determining the certified shoreline or shoreline in general.

   ii. Dune crest not always obvious, could create confusion on identification, does not distinguish between eolian (wind-derived) and wave-driven dunes.

iii. May create a problem on some beaches where the top of dune may be significantly mauka of vegetation/debris line.

3. Change definition in statutes and rules to simply "upper reach of the wash of the waves."

Proposed: If the purpose of the certified shoreline is to maximize the public beach area, then using the "upper reaches of the wash of the wave" would increase shoreline public access in many areas by moving the shoreline mauka. Reduces dependence on vegetation line as indicator of the shoreline.

Con: i. On some beaches, the stable, natural vegetation and dune crest lie makai of the upper wave wash – thus change could result in a significant hardship to landowner by reducing buildable area.
ii. Could pose complex regulatory problems if shoreline extends landward of public infrastructure such as roads.
iii. Lack of definition of what defines the "upper reach of the wash of the waves." Could lead to confusion on what shoreline is defined by and how it is documented.

4. Require mapping of multiple shoreline features potentially used in determining the certified shoreline such as tidal datum, vegetation line, debris line, top of beach dune, and shoreline all features would be considered in locating the certified shoreline.

Proposed: Collection of multiple mapped features in shoreline applications allows for more precise location of the shoreline features for review by regulatory agencies. Would serve as essential component to possible changes to definition that may separate shoreline for certification from other purposes such as jurisdiction and access. Members agreed this would enhance the current process and allow for a better understanding of individual coastal processes and hazards.

Con: i. May make the shoreline certification process slightly more costly and time-consuming, could create some confusion if there is not adequate education for private surveyors.
ii. Surveyors would need training to locate these features.

5. A set of photomaps of the coastal zone are produced (semi-annually) that depict the location of the shoreline using scientific evidence.

Proposed: High resolution photo base maps are produced with clearly identified shoreline location following criteria determined by scientific evidence. These would be periodically updated (semi-annually), and subject to an appeal process. Surveyors would

simply locate the shoreline on the ground, but not be responsible for interpretation of evidence. Members generally agreed that this method would standardize the process and take interpretation out of the hands of the surveyors. Over time, this effort may provide data on the long-term behavior of the shoreline.

Con:
i. Requires significant effort and expense.
ii. Would require constant updating and review for accuracy.
iii. Still presented with difficult problem of defining what the shoreline is.

Appendix C

Changes Currently Being Implemented by the Department of Land and Natural Resources

- Increased scrutiny and review of shoreline certifications including more frequent site inspections; evaluation of seasonal run up, induced vegetation, tidal stage, season of survey, wave statistics and run-up modeling.

- Increased enforcement of shoreline rules with respect to unauthorized landscaping of the shoreline.

- Outreach and education of surveyors of current DLNR policies and shoreline definition interpretation.

- DLNR-DAGS shoreline certification review panel (5 person review before Chair of DLNR signature).

- Adopting science-based evaluation and interpretation for shoreline reference features. This includes incorporating as much relevant scientific data and observations as possible.

- Hiring shoreline specialist through UH. A second qualified coastal scientist has been hired through the University of Hawaii Sea Grant Program to assist with evaluating shoreline certifications and developing science-based shoreline reference features.

- Development and implementation of a State DLNR Integrated Shoreline Policy to address the multi-jurisdictional components of coastal development, coastal hazards and public shoreline access among other coastal issues.